

What is claimed is:

1. A method comprising:

first removing substrate material with a first process from a substrate to form a feature extending into the substrate and within the substrate along an axis, wherein a cross-section of the feature taken transverse the axis has an upper terminus proximate a first substrate surface, the upper terminus having a first profile; and,

second removing additional substrate material with a second different process sufficiently to cause the upper terminus to have a second profile different from the first profile.

2. The method of claim 1, wherein the first removing and second removing forms the feature comprising a fluid-handling slot extending between the first surface and a generally opposing second surface.

3. The method of claim 1, wherein said first removing forms the first profile defined by sidewalls which are generally orthogonal to the first surface and wherein said second removing forms the second profile being defined, at least in part, by at least one sidewall portion that is rounded into the first surface.

4. The method of claim 1, wherein said first removing comprises directing a laser beam toward the first surface from a direction sufficient to contact the first surface before contacting a generally opposing second surface, and wherein said second removing comprises directing abrasive particles toward the first surface from a direction sufficient to contact the first surface before contacting the second surface.

5. The method of claim 4, wherein said directing abrasive particles also conditions portions of the first surface by removing debris created by said directing a laser beam.

6. A print cartridge formed in accordance with the method of claim 1.

7. A method comprising:

first directing a first removal means at a substrate from a direction sufficient to contact a first surface before contacting a second generally opposite surface; and,

second directing a second removal means at a substrate from a direction sufficient to contact the first surface before contacting the second surface, wherein said first directing and second directing form a feature in the substrate.

8. The method of claim 7, wherein said act of second directing comprises directing the second removal means to mechanically condition at least one of the first surface and one or more walls defining the feature.

9. The method of claim 7, wherein said act of second directing removes debris created by the first removal means.

10. A print cartridge formed in accordance with the method of claim 7

11. A method comprising:

first removing a substrate material through a first substrate surface, with a first removal process, to form a feature in the substrate, the feature being defined, at least in part, by at least one sidewall that is generally orthogonal to the first surface; and,

second removing additional substrate material with a second different removal process, sufficient to form a generally curved region in the at least one sidewall that joins with the first surface.

12. The method of claim 11, wherein upon conclusion of said first removing and second removing the feature comprises a fluid-handling slot through the substrate.

13. The method of claim 11, wherein said first removing substrate material forms a feature defined at the first surface by multiple sidewalls each of which are generally orthogonal to the first surface and wherein said second removing forms the generally curved portion on each of the multiple sidewalls, wherein said second removing also mechanically conditions the substrate by removing debris created by said first removing.

14. The method of claim 11, wherein said first removing extends through an entire thickness of the substrate as defined between the first substrate surface and a second generally opposing substrate surface.

15. The method of claim 11, wherein said first removing comprises etching and the second removing comprises abrasive jet machining.

16. A print cartridge formed in accordance with the method of claim 11.

17. A method comprising:

laser machining a substrate with a laser beam directed toward a first surface of a substrate and from a direction sufficient to contact the first surface before contacting a second generally opposing surface; and,

abrading the substrate, at least in part, to remove debris remaining from the act of laser machining; wherein upon completion of said laser machining and said

abrading, sufficient substrate material is removed to form a fluid-handling slot through the substrate.

18. The method of claim 17, wherein said abrading comprises directing abrasive particles toward the first surface in a direction sufficient to contact the first surface before contacting the second surface and wherein said directing removes potential crack initiation sites from the substrate proximate the slot and the first surface.

19. The method of claim 17, wherein said abrading comprises contouring at least a portion of a wall defining the fluid-handling slot.

20. A print cartridge formed in accordance with the method of claim 17.

21. A method of processing a semiconductor substrate comprising:
forming a majority of a fluid-handling slot in a substrate utilizing a first removal process; and,
forming less than a majority of the fluid-handling slot with at least one different removal process which also removes debris remaining from the first removal process.

22. The method of claim 21, wherein said forming less than a majority of the fluid-handling slot removes debris from walls of the slot.

23. The method of claim 21, wherein said forming less than a majority of the fluid-handling slot removes debris from a first surface of the substrate proximate the fluid-handling slot.

24. The method of claim 21, wherein said forming less than a majority of the fluid-handling slot removes debris from at least one wall of the fluid-handling slot and from a first surface of the substrate proximate the fluid-handling slot.

25. The method of claim 21, wherein said forming less than a majority of the fluid-handling slot creates an upper terminus of the fluid-handling slot that blends into the first surface.

26. A method comprising:

removing a portion of a substrate from a direction sufficient to contact a first surface before contacting a second generally opposite surface using a first process; and,

removing another portion of the substrate from a direction sufficient to contact the first surface before contacting the second surface, wherein said

removing the portion and removing the another portion form a feature in the substrate.

27. The method of claim 26, wherein said removing another portion removes debris created by the first removal means.

28. The method of claim 26, wherein said removing another portion comprises mechanically conditioning at least one of the first surface and one or more walls defining the feature.

29. The method of claim 26, wherein the removing a portion and removing another portion forms the feature comprising a fluid-handling slot extending between the first surface and the second surface.

30. The method of claim 26, wherein said removing a portion forms a first feature profile defined by sidewalls which are generally orthogonal to the first surface and wherein said removing another portion forms a second feature profile being defined, at least in part, by at least one sidewall portion that is rounded into the first surface.

31. The method of claim 26, wherein said removing a portion comprises directing a laser beam toward the first surface from a direction sufficient to contact the first surface before contacting the second surface, and wherein said removing another portion comprises directing abrasive particles toward the first surface from a direction sufficient to contact the first surface before contacting the second surface.

32. The method of claim 31, wherein said directing abrasive particles also conditions portions of the first surface by removing debris created by said directing a laser beam.

33. A print cartridge formed in accordance with the method of claim 26.

34. A fluid-ejecting device comprising:

a substrate comprising at least a first substrate surface and a second substrate surface, a fluid-handling slot formed by at least two substrate removal processes and extending through the substrate between the first substrate surface and the second substrate surface; and,

an orifice layer positioned over the first substrate surface, the orifice layer having multiple firing nozzles formed therein, at least some of the nozzles being in fluid flowing relation with the fluid-handling slot, wherein at least one of the first substrate surface and the second substrate surface being mechanically conditioned

by at least one of the removal processes prior to the orifice layer being positioned over the first substrate surface, at least in part, to reduce an incidence of debris occluding ink flow through individual nozzles.

35. The fluid-ejecting device of claim 34, wherein the fluid-handling slot is formed utilizing three different substrate removal processes.

36. The fluid-ejecting device of claim 34, wherein the fluid-handling slot is formed utilizing at least one substrate removal process directed at the first substrate surface and at least two different substrate removal processes directed at the second substrate surface.

37. A print cartridge comprising, at least in part, the fluid-ejecting device of claim 34.

38. A micro electro mechanical systems device comprising:
a substrate for supporting overlying layers; and,
at least one feature formed in the substrate, the feature being formed with at least a first substrate removal process and a second different substrate removal process, wherein the second different substrate removal process also removes debris created by the first substrate removal process.